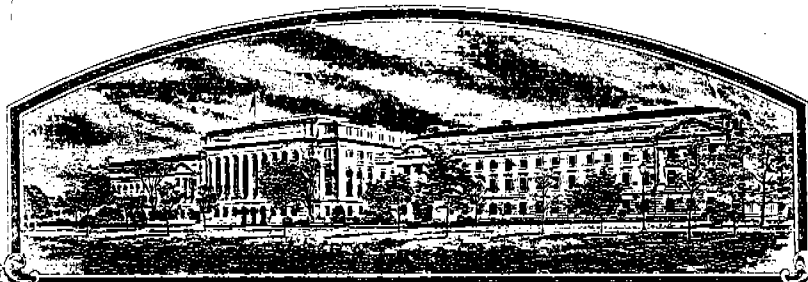


No.

7400105



# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

## Minnesota Agricultural Experiment Station

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *seventeen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. IN THE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS CLASS OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS OWNED BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

SOYBEAN

'Evans'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington this 18th day of April in the year of our Lord one thousand nine hundred and seventy-five

Attest

*L. J. Rollin*  
Commissioner  
Plant Variety Protection Office  
Grain Division  
Agricultural Marketing Service

*Earl V. Butz*  
Secretary of Agriculture



## APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: See Reverse.

1. VARIETY NAME OR TEMPORARY DESIGNATION <b>Evans</b>	2. KIND NAME <b>Soybean</b>	FOR OFFICIAL USE ONLY	
		PV NUMBER <b>7400105</b>	
3. GENUS AND SPECIES NAME <b>Glycine max</b>	4. FAMILY NAME (Botanical) <b>Leguminosae</b>	FILING DATE <b>6.27.74</b>	TIME <b>1:30</b> A.M. P.M.
	5. DATE OF DETERMINATION <b>December 27, 1973</b>	FEE RECEIVED \$ <b>250.00</b>	BALANCE DUE \$ <b>—</b>
		\$ <b>250.00</b>	\$ <b>—</b>
		\$ <b>250.00</b>	\$ <b>—</b>
6. NAME OF APPLICANT(S) <b>Minnesota Agricultural Experiment Station</b>	7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) <b>Institute of Agriculture University of Minnesota St. Paul, Minnesota 55101</b>	8. TELEPHONE AREA CODE AND NUMBER <b>612/373-0867</b>	
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (Corporation, partnership, association, etc.) <b>State experiment station</b>		10. STATE OF INCORPORATION	11. DATE OF INCORPORATION

12. Name and mailing address of applicant representative(s), if any, to serve in this application and receive all papers:

**J. W. Lambert**  
Department of Agronomy and Plant Genetics  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- ☒ 13A. Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.)
- ☒ <sup>R/S</sup> 13B. Exhibit B, Botanical Description of the Variety
- ☒ 13C. Exhibit C, Objective Description of the Variety
- ☒ 13D. Exhibit D, Data Indicative of Novelty (See Exhibit C)
- ☒ 13E. Exhibit E, Statement of the Basis of Applicant's Ownership

14A. Does the applicant(s) specify that seed of this variety be sold by variety name only as a class of certified seed? (See Section 83(a). (If "Yes," answer 14B and 14C below.) ☒ YES ☐ NO14B. Does the applicant(s) specify that this variety be limited as to number of generations? ☐ YES ☒ NO14C. If "Yes," to 14B, how many generations of production beyond breeder seed? ☒ FOUNDATION ☒ REGISTERED ☒ CERTIFIED

The applicant declares that a viable sample of basic seed of this variety will be deposited upon request before issuance of a certificate and will be replenished periodically in accordance with such regulations as may be applicable.

The undersigned applicant(s) of this sexually-reproduced novel plant variety believes that the variety is distinct, uniform, and stable as required in Section 41 and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Applicant is informed that false representation herein can jeopardize protection and result in penalties.

(DATE)

**5/28/74**

(DATE)

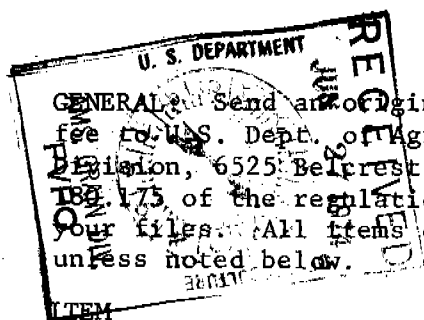
(SIGNATURE OF APPLICANT)

**W. J. Lambert**

(SIGNATURE OF APPLICANT)

**Director, Minnesota Agricultural Experiment Station**

## INSTRUCTIONS



GENERAL: Send an original copy of the application, exhibits and \$250.00 fee to U.S. Dept. of Agriculture, Agricultural Marketing Service, Grain Division, 6525 Belcrest Road, Hyattsville, Maryland 20782. (See Section 189.175 of the regulations and rules of practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

- 5 Insert the date the applicant determined that he had a new variety based on the definition in Section 41 (a) of the Act and decision is made to increase the seed.
- 13a First, give the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method. Second, give the details of subsequent stages of selection and multiplication. Third, indicate the type and frequency of variants during reproduction and multiplication and state how these variants may be identified. Fourth, provide evidence on stability.
- 13b First, give any special characteristics of the seed and of the plant as it passes through the seedling stage, flowering stage and the fruiting stage. Second, describe the mature plant and compare it with a similar commercial variety grown under the same conditions, and indicate the differences.
- 13c A supplemental form will be furnished by the PVPO to describe in detail a variety for each kind of seed.
- 13d Provide complete data indicative of novelty. Seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty may be submitted. Seeds submitted may be sterile.
- 13e Indicate whether applicant is the actual breeder, the employer of the breeder, the owner through purchase or inheritance, etc.

## Exhibit A

ORIGIN AND BREEDING HISTORY EVANS SOYBEANS

Evans traces to an  $F_4$  plant selected in the progeny of an  $F_3$  plant from a cross of Merit and Harosoy. Seeds from the plants of the  $F_5$  row were bulked for use in yield trials in  $F_6$ . The strain was tested in Minnesota for three years and regionally two years before a small purified increase was produced. This purified lot tracing to 30 plants was the basis for the present foundation seed. Evans has been yield-tested in Minnesota for eight years and regionally for five. It was released to registered and/or certified seed growers in Minnesota and two other states on April 1, 1974.

EXHIBIT B

## Botanical Description of Evans Soybeans

'Evans' is an indeterminate Group 0 variety of soybeans (Glycine max, L., Merr.). The plants are tall for their relative maturity with 14 to 18 nodes on the main stem, and they develop a narrow canopy. The leaves are dark, bluish green at full canopy with well defined lighter green veins. The seventh, eighth, and ninth trifoliolate leaves are commonly largest. Petioles of these leaves are usually 8 or 9 inches long and the oval leaflets are 2.5 to 4.0 inches wide. Leaflets on the upper leaves are markedly smaller and the petioles are shorter. Some branching at the lower nodes normally occurs. Both the branches and the leaf petioles are attached at a narrow angle with the main stem, giving the plant a tall, narrow, upright appearance. The flowers are medium sized and white. Commonly there are two sessile flowers and one short raceme with two to five flowers at each node. The pubescence is gray. At full maturity the stems have light brown pigmentation. Coupled with the gray pubescence this produces a "light gray" appearance at harvest time. Seed coats and hila are yellow.

OBJECTIVE DESCRIPTION OF VARIETY  
SOYBEAN (GLYCINE MAX)

INSTRUCTIONS: See Reverse.

NAME OF APPLICANT(S)

Minnesota Agricultural Experiment Station

ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code)

Institute of Agriculture  
University of Minnesota, St. Paul, Minnesota 55101

FOR OFFICIAL USE ONLY

PVPO NUMBER

7400105

VARIETY NAME OR TEMPORARY  
DESIGNATION

EVANS

Place the appropriate number that describes the varietal character of this variety in the boxes below.

## 1. SEED SHAPE:

☒ 1 = SPHERICAL    2 = SPHERICAL FLATTENED    3 = ELONGATE    4 = OTHER (Specify)

## 2. SEED COAT COLOR:

☒ 1 = YELLOW    2 = GREEN    3 = BROWN    4 = BLACK  
5 = OTHER (Specify)

SHADE:

☒ 1 = LIGHT    2 = MEDIUM    3 = DARK

## 3. SEED COAT LUSTER:

☒ 1 = DULL    2 = SHINY

## 4. SEED SIZE

☒ 15 ☒ 5 GRAMS PER 100 SEEDS

## 5. HILUM COLOR:

☒ 2 1 = BUFF    2 = YELLOW    3 = BROWN    4 = GRAY    5 = IMPERFECT BLACK  
6 = BLACK    7 = OTHER (Specify)

SHADE:

☒ 1 = LIGHT    2 = MEDIUM    3 = DARK

## 6. COTYLEDON COLOR:

☒ 1 1 = YELLOW    2 = GREEN

## 7. LEAFLET SIZE (See Reverse):

☒ 2 1 = SMALL    2 = MEDIUM    3 = LARGE

## 8. LEAFLET SHAPE:

☒ 1 1 = OVATE    2 = OBLONG    3 = LANCEOLATE    4 = ELLIPTICAL    5 = OTHER (Specify)

## 9. LEAF COLOR (See reverse):

☒ 2 1 = LIGHT GREEN    2 = MEDIUM GREEN    3 = DARK GREEN

## 10. FLOWER COLOR:

☒ 1 1 = WHITE    2 = PURPLE  
3 = OTHER (Specify)

## 11. POD COLOR:

☒ 2 1 = TAN    2 = BROWN    3 = BLACK

## 12. POD SET:

☒ 1 1 = SCATTERED    2 = CONCENTRATED

## 13. PLANT PUBESCENCE COLOR:

☒ 1 1 = GRAY    2 = BROWN    3 = OTHER (Specify)

SHADE:

☒ 2 1 = LIGHT    2 = MEDIUM    3 = DARK

## 14. PLANT TYPES (See Reverse):

☒ 1 1 = SLENDER    2 = BUSHY    3 = INTERMEDIATE

## 15. PLANT HABIT:

☒ 2 1 = DETERMINATE    2 = INDETERMINATE  
3 = OTHER (Specify)

## 16. HYPOCOTYL COLOR:

☒ 1 1 = GREEN    2 = PURPLE

## 17. SEED PROTEIN:

☒ ? 1 = A    2 = B18. NUMBER OF DAYS TO FLOWERING  
(Place a zero in first box (e.g. 0 9) when  
days are 9 or less.)☐ ☐

## 19. MATURITY GROUP:

☒ 2 1 = 00    2 = 0    3 = I    4 = II    5 = III  
6 = IV    7 = V    8 = VI    9 = VII    10 = VIII20. SIZE OF 10 DAY OLD SEEDLING GROWN UNDER CONSTANT LIGHT (Growth Chamber) AT 25° C. (Place a zero in first box  
(e.g. 0 2) when size is 9 mm. or less.)☐ ☐ MM. LENGTH  
OF SEEDLING long☐ ☐ MM. LENGTH  
OF COTYLEDON☐ ☐ MM. WIDTH  
OF COTYLEDON

## 21. DISEASE: (Enter 0 - Not Tested; 1 - Susceptible; 2 - Resistant)

<input checked="" type="checkbox"/> BACTERIAL PUSTULE	<input type="checkbox"/> SOYBEAN CYST	<input type="checkbox"/> DOWNY MILDEW	<input type="checkbox"/> PURPLE STAIN	<input checked="" type="checkbox"/> POD AND STEM BLIGHT	<input type="checkbox"/> ROOT KNOT
<input checked="" type="checkbox"/> FROGEYE	<input type="checkbox"/> STEM CANKER	<input checked="" type="checkbox"/> PHYTO-PHTHORA	<input checked="" type="checkbox"/> BROWN STEM ROT	<input type="checkbox"/> TARGET SPOT	<input checked="" type="checkbox"/> BROWN SPOT
<input type="checkbox"/> BUD BLIGHT	<input type="checkbox"/> WILDFIRE	<input type="checkbox"/> RHIZOCTONIA ROT	<input type="checkbox"/> OTHER (Specify)		

REVISED Rfs  
EXHIBIT D

Data Indicative of Novelty in Evans Soybeans

'Evans' is most similar to 'Merit'. However, 'Evans' yields 10-15% higher and has 8% larger seeds than 'Merit'. Seeds of 'Evans' have yellow hila; seeds of 'Merit' have buff hila.

Exhibit E

The Minnesota Agricultural Experiment Station is the employer of the breeder, Dr. J. W. Lambert, and reserves all rights afforded by protection of the Evans variety.



7400105

## 22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED.

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant shape	Merit	Petiole angle	Merit
Leaf shape	Merit	Seed size	Swift
Leaf color	Merit	Seed shape	Harosoy
Leaf surface	Merit	Seedling pigmentation	Merit

## 23. GIVE DATA FOR SUBMITTED AND SIMILAR STANDARD VARIETY:

VARIETY	NO. OF DAYS TO MATURITY	LODGING SCORE	PLANT HEIGHT	LEAF SIZE		CONTENT		AVERAGE NO. OF PODS PER PLANT	IODINE NO.
				Width	Length	Protein	Oil		
Submitted	126	2.0	34			39.4	21.6 %		
Name of similar variety Merit	127	2.0	34			40.1	21.3		

## INSTRUCTIONS

**GENERAL:** The following publications may be used as a reference aid for completing this form:

1. Scott, Walter O. and Samuel R. Aldrich, 1970, Modern Soybean Production, The Farmer Quarterly.
2. Norman, A. G., 1963, The Soybean: Genetics, Breeding, Physiology, Nutrition, Management.
3. McKie, J. W., and K. L. Anderson, 1970, The Soybean Book.

**LEAF COLOR:** Nickerson's or any recognized color fan may be used to determine the leaf color of the described variety. The following Soybean varieties may be used as a guide to identify the colors listed on the form.

COLOR	VARIETY
Light Green	"Ada"
Medium Green	"Wilkin"
Dark Green	"Swift"

**LEAF SIZE:** The following varieties may be used as a guide to identify the relative size leaves.

SIZE	VARIETY
Small	"Amsoy"
Medium	"Bonus"
Large	"Anoka"

**PLANT TYPE:** The following varieties may be used as a guide to identify the plant type.

TYPE	VARIETY
Slender	"Vansoy"
Intermediate	"Wirth"
Bushy	"Adelphia"